

NEW RECORDS OF STONEFLIES (PLECOPTERA) FROM KENTUCKY¹

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ABSTRACT: Six species of stoneflies are reported for the first time for Kentucky. An undescribed species of *Yugus* (Perlodidae) represents the only record of the genus known from the state. Other species reported are *Leuctra tenuis* (Leuctridae), *Prostoia completa* (Nemouridae), *Agnatina flavescens* and *Paragnetina immarginata* (Perlidae), and *Pteronarcys comstocki* (Pteronarcyidae). A total of 86 stonefly species are now known to occur in Kentucky.

Tarter et al. (1986) presented the first checklist of stoneflies for Kentucky, listing 77 species. They also speculated on an additional 15 species which occur in neighboring states that may also occur in Kentucky. Since that time, several synonymies and new combinations have been published (Stark 1986, 1989, 1990, 1991), and new species and additional records were added by Kondratieff and Kirchner (1988, 1996). An updated list is maintained by Stark (1998). Species of one genus common in Kentucky (*Perlesta*), is not listed because either species identifications have not been verified or species remain undescribed.

Adult male specimens of *Leuctra tenuis* (Pictet) were taken from South Fork Station Camp Creek (Kentucky River Drainage), NE of Wind Cave in Jackson Co., KY (37° 32' 18"; 83° 54' 42") on 3 Sep 1998. In North America, this species has been collected from 22 states/provinces including adjacent IL, OH, VA, and WV (Stark 1998).

Adults of *Prostoia completa* (Walker) were collected from Clifty Creek (Cumberland River Drainage), 0.2 km above the confluence with Brushy Creek near Elrod in Pulaski Co., KY (37° 13' 02"; 84° 28' 30") on 2 Feb 1998. This species is known from 23 states/provinces including adjacent IL, VA, and WV (Stark 1998).

Mature nymphs of *Agnatina flavescens* (Walsh) were collected from cobble substrate in Clear Creek (Kentucky River Drainage) at the Hifner Road crossing north of Nonesuch in Woodford Co., KY (37° 56' 40"; 84° 45' 53") on 10 July 1998. I also collected specimens in similar substrate from South Fork Elkhorn Creek (Kentucky River Drainage), at Scruggs Lane outside of Frankfort, in Franklin Co., KY (38° 12' 33"; 84° 45' 02") on 27 Nov 1998. This species is known to occur in 18 states/provinces including adjacent IL, IN, OH, TN, VA, WV (Stark 1998).

Mature nymphs of *Paragnetina immarginata* (Say) were taken from cobble-boulder substrate in Fugitt Creek (Cumberland River Drainage), 0.5

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km upstream of its confluence with Clover Fork Cumberland River near Louellen in Harlan Co., KY (36° 55' 31"; 83° 02' 45") on 10 July 1997 and 14 Oct 1998. This species has been reported from 15 states/provinces including adjacent TN, VA, and WV (Stark 1998).

Nymphs of *Pteronarcys comstocki* Smith were collected from cobble-boulder substrate in Cavanaugh Creek (Kentucky River Drainage) 0.4 km upstream of Hopper Cave Branch in Jackson Co., KY (37° 32' 20"; 84° 58' 40") on 2 July 1998 and 1 Dec 1998. It is known from seven states/provinces and adjacent VA and WV (Stark 1998).

An undescribed species (being described by C.H. Nelson) belonging to the perlotid genus *Yugus* was collected from numerous small headwater streams in eastern Kentucky. I collected mature nymphs from an unnamed tributary to Line Fork Creek (Kentucky River Drainage) in Lilley Cornett Woods Natural Area, Letcher Co., KY (37° 04' 35"; 83° 00' 10") on 16 April 1996.

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